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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force									DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development				R-1 ITEM NOMENCLATURE PE 0305173F: Space & Missile Test & Evaluation Center							
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
Total Program Element	1.920	3.593	4.572	0.000	4.572	1.658	1.680	1.704	1.729	Continuing	Continuing
67A014: R&D Space and Missile Operations	1.920	3.593	4.572	0.000	4.572	1.658	1.680	1.704	1.729	Continuing	Continuing
A. Mission Description and Budget Item Justification											
<p>The RDT&E efforts within this program focus on the Multi-Mission Satellite Operations Center (MMSOC), which the Research and Development (R&D) Space and Missile Operations (RDSMO) program started in FY 2007. The main objective of MMSOC is to develop the capability to rapidly support R&D and operational systems and to transition R&D space vehicle technology with residual military utility to operational status for immediate war-fighter support. MMSOC is a multiple-mission operation system that uses standard software (1) to perform satellite command and control (C2) in support of launch requirements; (2) to develop and test tactics, techniques, procedures and concepts to conduct operations for R&D satellites; (3) to provide a satellite C2 incremental block evolution resource for RDT&E of new systems and concepts; and (4) to deliver operational flexibility for new and currently-flying assigned satellites. MMSOC leverages demonstrated RDT&E experience to expand the capabilities of proven technologies currently in use in Air Force Space Development and Test wing facilities. MMSOC also supports all RDSMO-sustained space vehicles through existing resources.</p>											
<p>RDSMO develops and acquires systems to: operate experimental, demonstration, and operational satellites; operate fixed and deployable satellite ground systems; perform satellite compatibility testing; act as the focal point and center of expertise for DoD experimental and demonstration space and missile operations; support space and missile R&D; and conduct/support experimental/demonstration of space and missile Developmental Test and Evaluation (DT&E) and Initial Operational Test and Evaluation (IOT&E) activities. It consists of (1) the RDT&E Support Complex (RSC) at Kirtland AFB, NM and MMSOC equipment installed in 1 SOPS at Schriever AFB, CO which operate R&D satellites; (2) the Space Test Operations organization at Kirtland AFB which is the focal point for small satellite tests, plans, programs, and policy and (3) the deployable test systems, based at Kirtland AFB, NM which deploys mobile antennas worldwide to support space RDT&E activities.</p>											
<p>The RDT&E effort also includes the development of a mobile test system, known as the Remote Tracking Station Block Change Transportable Space Test Resource (RBC TSTR), used to verify satellite compatibility with the Air Force Satellite Control Network (AFSCN) Remote Block Change architecture, currently being fielded worldwide. System will be capable of being deployed around the world to perform compatibility testing in the factory as well as launch ranges to include Kodiak, Alaska, Wallops Island, Virginia, and Kwajalein Atoll where there is no other existing or planned capability. This was a new start in FY 2010.</p>											
<p>This effort is in Budget Activity 7, Operational System Development, and it supports research and development of space systems.</p>											

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Exhibit R-2, RDT&E Budget Item Justification: PB 2011 Air Force				DATE: February 2010	
APPROPRIATION/BUDGET ACTIVITY		R-1 ITEM NOMENCLATURE			
3600: Research, Development, Test & Evaluation, Air Force		PE 0305173F: Space & Missile Test & Evaluation Center			
BA 7: Operational Systems Development					
B. Program Change Summary (\$ in Millions)					
	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
Previous President's Budget	1.967	3.599	0.000	0.000	0.000
Current President's Budget	1.920	3.593	4.572	0.000	4.572
Total Adjustments	-0.047	-0.006	4.572	0.000	4.572
• Congressional General Reductions		-0.006			
• Congressional Directed Reductions		0.000			
• Congressional Rescissions	0.000	0.000			
• Congressional Adds		0.000			
• Congressional Directed Transfers		0.000			
• Reprogrammings	0.000	0.000			
• SBIR/STTR Transfer	0.000	0.000			
• Other Adjustments	-0.047	0.000	4.572	0.000	4.572
Change Summary Explanation					
Note: The FY 2010 President's Budget submittal did not reflect FY 2011 through FY 2015 funding. Therefore, explanation of changes between the two budget positions cannot be made in a relevant manner					

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force								DATE: February 2010			
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0305173F: <i>Space & Missile Test & Evaluation Center</i>				PROJECT 67A014: <i>R&D Space and Missile Operations</i>			
COST (\$ in Millions)	FY 2009 Actual	FY 2010 Estimate	FY 2011 Base Estimate	FY 2011 OCO Estimate	FY 2011 Total Estimate	FY 2012 Estimate	FY 2013 Estimate	FY 2014 Estimate	FY 2015 Estimate	Cost To Complete	Total Cost
67A014: <i>R&D Space and Missile Operations</i>	1.920	3.593	4.572	0.000	4.572	1.658	1.680	1.704	1.729	Continuing	Continuing
Quantity of RDT&E Articles	0	0	0	0	0	0	0	0	0		
A. Mission Description and Budget Item Justification <p>The RDT&E efforts within this program will focus on the Multi-Mission Satellite Operations Center (MMSOC), which Research and Development (R&D) Space and Missile Operations (RDSMO) program will start in FY 2007. The main objective of MMSOC is to transition R&D space vehicle technology with residual military utility to operational status for immediate real world support and to perform initial operational utility assessment for future acquisition programs. MMSOC will be a multiple-mission operation system that uses standard software to (1) perform satellite command and control (C2) in support of launch requirements; (2) conduct residual operations capability for R&D satellites in order to develop/test tactics, techniques, procedures and concepts; (3) provide a satellite C2 spiral evolution resource for RDT&E of new systems and concepts; and (4) deliver new operational flexibility for currently-flying assigned satellites. MMSOC will leverage demonstrated RDT&E experience to expand the capabilities and proven technologies currently in use by other RDSMO facilities. MMSOC will also support all RDSMO-sustained space vehicles through existing resources. In addition, it will add the capability to rapidly support operational counterspace systems (such as Near-field Infrared Experiment (NFIRE), Interim Satellite as a Sensor (ISAS), and Rapid Attack Identification Detection and Reporting System (RAIDRS)).</p> <p>The RDSMO Program Element also contains O&M and OPAF funds. RDSMO develops and acquires systems to: operate experimental and demonstration satellites; operate fixed and deployable satellite ground systems; perform satellite compatibility testing; act as the focal point and center of expertise for DoD experimental and demonstration space and missile operations; support space and missile R&D; and conduct/support experimental/demonstration space and missile Developmental Test and Evaluation (DT&E) and Initial Operational Test and Evaluation (IOT&E) activities. It consists of (1) the RDT&E Support Complex (RSC) at Kirtland AFB, NM which operates R&D satellites; (2) the Center for Research Support (CERES) at Schriever AFB, CO which operates residual satellites and serves as a test bed; (3) the Camp Parks Communication Annex at Dublin, CA which provides multi-band Telemetry Tracking and Commanding (TT&C), calibration and on-orbit testing; (4) the Test, Operations, and Programs at Kirtland AFB which is the focal point for tests, plans, programs, and policy and (5) the deployable test systems, based at Kirtland AFB, NM which deploys mobile antennas worldwide to support space RDT&E activities.</p> <p>This effort is in Budget Activity 7, Operational System Development, and it supports research and development of space systems.</p>											
B. Accomplishments/Planned Program (\$ in Millions)											

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: Research, Development, Test & Evaluation, Air Force BA 7: Operational Systems Development		R-1 ITEM NOMENCLATURE PE 0305173F: Space & Missile Test & Evaluation Center		PROJECT 67A014: R&D Space and Missile Operations		
B. Accomplishments/Planned Program (\$ in Millions)						
		FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total
MAJOR THRUST: Multi-Mission Satellite Operations Center (MMSOC) development/integration FY 2009 Accomplishments: In FY2009: Continue MMSOC development/integration efforts; Continue program office support and related support activities such as, but not limited to mission support, special studies, SETA, FFRDC, etc FY 2010 Plans: In FY2010: Continue MMSOC development/integration efforts; Continue program office support and related support activities such as, but not limited to mission support, special studies, SETA, FFRDC, etc FY 2011 Base Plans: In FY2011: Continue MMSOC development/integration efforts; Continue program office support and related support activities such as, but not limited to mission support, special studies, SETA, FFRDC, etc FY 2011 OCO Plans: In FY 2011 OCO: Not Applicable.		1.920	1.627	1.646	0.000	1.646
MAJOR THRUST: Remote Tracking Station Block Change Transportable Space Test Resource (RBC TSTR). Used to verify satellite compatibility with the AFSCN RBC architecture. FY 2009 Accomplishments: In FY2009: N/A FY 2010 Plans: In FY2010: Award contract for RBC TSTR system		0.000	1.966	2.926	0.000	2.926

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Exhibit R-2A, RDT&E Project Justification: PB 2011 Air Force				DATE: February 2010							
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>		R-1 ITEM NOMENCLATURE PE 0305173F: <i>Space & Missile Test & Evaluation Center</i>		PROJECT 67A014: <i>R&D Space and Missile Operations</i>							
B. Accomplishments/Planned Program (\$ in Millions)											
				FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total			
<i>FY 2011 Base Plans:</i> In FY2011: Complete testing and integration and deliver the RBC TSTR system <i>FY 2011 OCO Plans:</i> In FY 2011 OCO: Not Applicable.											
Accomplishments/Planned Programs Subtotals				1.920	3.593	4.572	0.000	4.572			
C. Other Program Funding Summary (\$ in Millions)											
Line Item	FY 2009	FY 2010	FY 2011 Base	FY 2011 OCO	FY 2011 Total	FY 2012	FY 2013	FY 2014	FY 2015	Cost To Complete	Total Cost
• PE Not Provided (18134): <i>OPAF, Electronics & Telecom Equipment (BA 03, PE 0305173F, P-20)</i>	10.015	11.299	3.470	0.000	3.470	3.534	3.593	3.646	3.705	0.000	0.000
D. Acquisition Strategy											
The AF uses the competitively-awarded Engineering, Development, and Sustainment (EDS) Contract, managed by Space and Missile System Center, Space Development & Test Wing, to modernize and sustain MMSOC. The AF uses the competitively-awarded AFSCN RBC contract to develop RBC TSTR.											
E. Performance Metrics											
Please refer to the Performance Base Budget Overview Book for information on how Air Force resources are applied and how those resources are contributing to Air Force performance goals and most importantly, how they contribute to our mission.											

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force											DATE: February 2010		
APPROPRIATION/BUDGET ACTIVITY 3600: <i>Research, Development, Test & Evaluation, Air Force</i> BA 7: <i>Operational Systems Development</i>				R-1 ITEM NOMENCLATURE PE 0305173F: <i>Space & Missile Test & Evaluation Center</i>				PROJECT 67A014: <i>R&D Space and Missile Operations</i>					
Product Development (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
Engineering, Development, and Sustainment (EDS) Follow-on Contract	C/CPAF	Lockheed Martin Kirtland, Schreiver AFB	1.920	1.627	Nov 2009	1.646		0.000		1.646	Continuing	Continuing	Continuing
Subtotal			1.920	1.627		1.646		0.000		1.646			
Remarks													
Test and Evaluation (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
System Test and Engineering (STEC) Contract	C/CPAF	Kirtland AFB	0.000	0.000		0.000		0.000		0.000	Continuing	Continuing	0.000
Subtotal			0.000	0.000		0.000		0.000		0.000			0.000
Remarks													

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Exhibit R-3, RDT&E Project Cost Analysis: PB 2011 Air Force											DATE: February 2010		
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Management Services (\$ in Millions)													
				FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total			
Cost Category Item	Contract Method & Type	Performing Activity & Location	Total Prior Years Cost	Cost	Award Date	Cost	Award Date	Cost	Award Date	Cost	Cost To Complete	Total Cost	Target Value of Contract
RBC TSTR Contract	TBD/TBD	Honeywell Colorado Springs, CO	0.000	1.966	Jan 2010	2.926		0.000		2.926	0.000	4.892	3.923
Subtotal			0.000	1.966		2.926		0.000		2.926	0.000	4.892	3.923
Remarks													
			Total Prior Years Cost	FY 2010		FY 2011 Base		FY 2011 OCO		FY 2011 Total	Cost To Complete	Total Cost	Target Value of Contract
Project Cost Totals			1.920	3.593		4.572		0.000		4.572			
Remarks													
Total Prior Years Cost may include only FY 2009 data.													

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Exhibit R-4, RDT&E Schedule Profile: PB 2011 Air Force

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APPROPRIATION/BUDGET ACTIVITY

3600: Research, Development, Test & Evaluation, Air Force
BA 7: Operational Systems Development

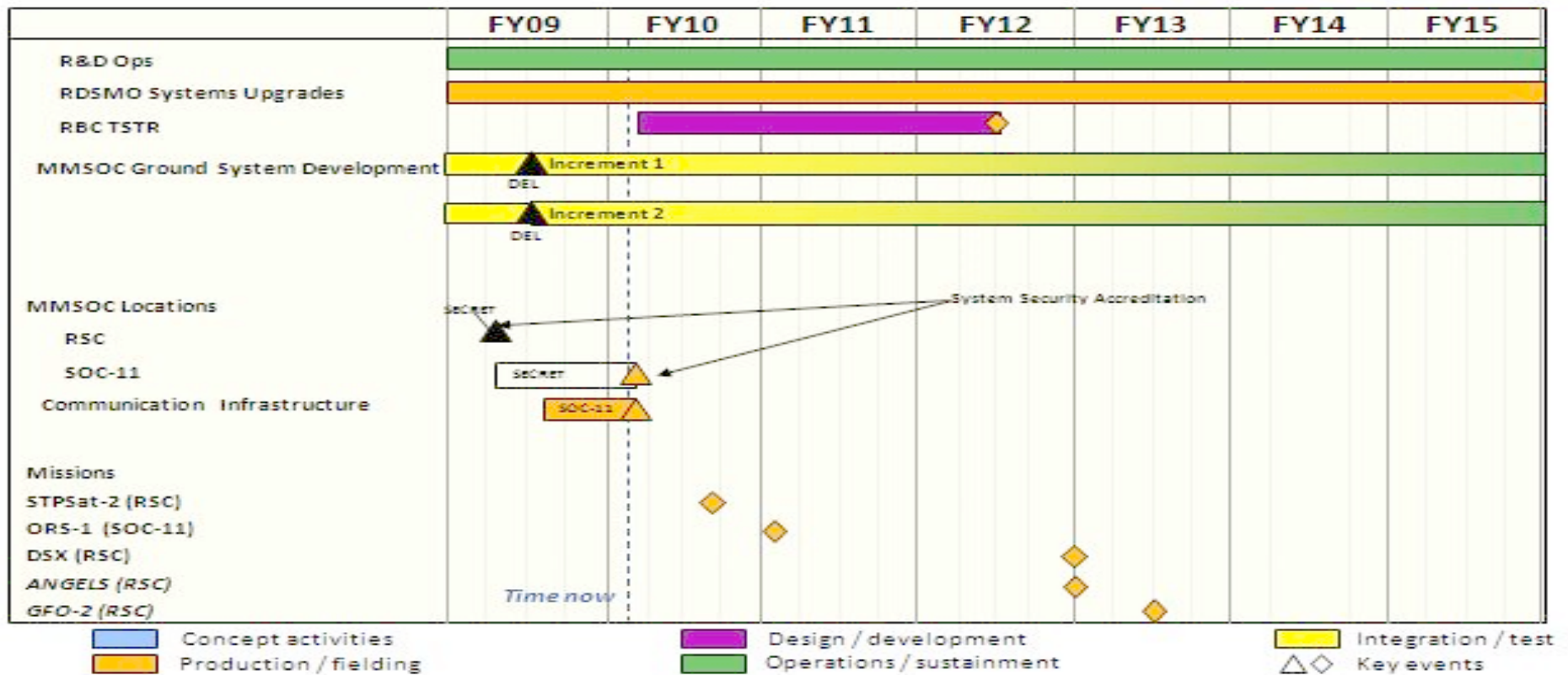
R-1 ITEM NOMENCLATURE

PE 0305173F: Space & Missile Test & Evaluation Center

PROJECT

67A014: R&D Space and Missile Operations

RDSMO Schedule



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Exhibit R-4A, RDT&E Schedule Details: PB 2011 Air Force			DATE: February 2010
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Schedule Details

Event	Start		End	
	Quarter	Year	Quarter	Year
Increment 1-TT&C with Limited Mission Planning	3	2009	3	2009
Increment 2-Support 1 Mission	3	2009	3	2009
Remote Tracking Block Change Transportable Space Test Resource Contract Award	2	2010	2	2010

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